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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,141	STAHL ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER T. WYLLIE	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 20-22* is/are rejected.

7)☒ Claim(s) *19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED OFFICE ACTION

1. This action is responsive to the communication received on October 9th, 2008. Claims 1-4, 12-21 and 22 have been amended. Claims 1-22 are again presented for examination.

2. Application 10/561,141 is a 371 of PCT/US04/20894 (06/30/2004) which claims benefit to 60/483,785 (06/30/2003) and 60/496,248 (08/18/2003).

3. Applicant's arguments filed October 9th, 2008 have been carefully considered, but deemed to be not persuasive.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 21 is rejected under 35 U.S.C. 101 because the claimed subject matter is directed to a signal. In paragraph 0055, the applicant defines "a computer readable medium" as a signal in compressed or uncompressed form.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 1, 4-7, 9, 12-14, 20, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et al. (US 6,968,374).

Regarding claim 1, Fujisawa discloses a method for transferring packet based digital data between a first communications network and a second communications network **(see Figure 1, Ethernet Sub-network 2, Bridge 4, and IEEE 1394 Sub-network 3 [packets of data are transmitted and received in the Ethernet network and the 1394 network via Bridge 4])**, said method comprising the steps of: receiving a

stream of packets based on digital data from the first communications network **(column 5, lines 26-29 [the bridge transforms a packet transmitted from the Ethernet sub-network into a predetermined system format and transmits it to the 1394 network])**; a second network having a communications protocol that allows for the setup and communications over discrete channels of a reserved bandwidth **(column 4, lines 46-48 [the entire network is controlled according to TCP/IP, TCP incorporates a connection establishment stage, therefore either network has a protocol that allows for setup and communications on a channel])**; and modifying header information associated with the data packets in the stream into a format suitable for communication through said established channel for transfer to said second communications network **(column 5, lines 26-32 [the bridge transforms the packet, sent from the Ethernet network, into a predetermined system format in the data link layer and transmits it to the 1394 and vice-versa])**. Fujisawa does not disclose that the first communications network has a prioritized communications protocol. However, Skarica et al. discloses such a feature **(column 4, lines 38-40 [Ethernet supports quality of service protocols such as IEEE 802.1p, MPLS, and Diffserv])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Skarica et al. into the system of Fujisawa. The method of Skarica et al. can be implemented by modifying the packets of the Ethernet network to include a Type of Service (ToS) Field or a Quality of Service (QoS) Field to specify the requested service by Ethernet Terminal 5. The motivation for this is to enable the bridge to allocate enough bandwidth for the QoS requested.

The references as applied above do not disclose determining a priority code associated with the data packet and establishing a channel in response to the priority code for communicating information in the stream of packets based on digital data to a second network. However, Lemieux et al. discloses such a feature **(column8, lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lemieux et al. can be established by enabling the bridge to establish a suitable channel based on the QoS associated with the packet. The motivation for this is to ensure the transmission of data across the network and thereby creating a more reliable network.

Regarding claim 4, Fujisawa further discloses determining whether data packet requires transmission to a second device associated with the second communications network **(column 12, lines 31-34 [the CPU in Bridge 4 determines if the packet is to be received by the Ethernet interface 13 or the 1394 interface 14])**. Lemieux et al. further discloses establishing a reserved bandwidth data transmission channel for communicating the data stream path to the second device based on a priority value includes in the data packet **(column8, lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lemieux et al. can be established by enabling the bridge to establish a suitable channel based on the QoS associated with the packet. The motivation for this is to ensure the transmission of data across the network and thereby creating a more reliable network.

Regarding claim 5, Fujisawa discloses an apparatus for proving packet-based digital communications between a first network communications network and a second communications network **(see Figure 1, Ethernet Sub-network 2, Bridge 4, and IEEE 1394 Sub-network 3 [packets of data are transmitted and received in the Ethernet network and the 1394 network via Bridge 4])**, the apparatus comprising a first transceiver for communicating with the first network **(see Figure 2, Ethemet Interface 13); a second transceiver adapted for communicating with the second communications network (see Figure 2, 1394 Interface 14)**, the second network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth **(column 4, lines 46-48 [the entire network is controlled according to TCP/IP, TCP incorporates a connection establishment stage, therefore either network has a protocol that allows for setup and communications on a channel])**; a processor in communication with the first and second transceivers **(see Figure 2, CPU 11)**; wherein the processor is adapted to perform a first modification process to convert a data packet received form the first transceiver into a format suitable for communication through the second network and

the processor is further configured to perform a second modification to convert a data packet received from the second transceiver into a suitable format for communication through the first transceiver to the first network **(column 5, lines 26-32 [the bridge transforms a packet from the Ethernet network into a predetermined format in the data link layer and transmits it to the 1394 network and vice-versa])**. Fujisawa does not disclose that the first communications network has a prioritized communications protocol. However, Skarica et al. discloses such a feature **(column 4, lines 38-40 [Ethernet supports quality of service protocols such as IEEE 802.1p, MPLS, and Diffserv])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Skarica et al. into the system of Fujisawa. The method of Skarica et al. can be implemented by modifying the packets of the Ethernet network to include a Type of Service (ToS) Field or a Quality of Service (QoS) Field to specify the requested service by Ethernet Terminal 5. The motivation for this is to enable the bridge to allocate enough bandwidth for the QoS requested.

The references as applied above do not disclose determining a priority code associated with the data packet and establishing a channel in response to the priority code for communicating information in the stream of packets based on digital data to a second network. However, Lemieux et al. discloses such a feature **(column 8, lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lemieux et al. can be established by enabling the bridge to establish a suitable channel based on the QoS associated with the packet. The motivation for this is to ensure the transmission of data across the network and thereby creating a more reliable network.

Regarding claim 6, Fujisawa further discloses that the first communications system is an Ethernet network **(see Figure 1, Ethernet Sub-network 2)**.

Regarding claim 7, Fujisawa further discloses that the second communications network is an IEEE 1394 network **(see Figure 1, IEEE Sub-network 3)**.

Regarding claim 9, Lemieux et al. further discloses that the processor establishes the need to set up a reserved bandwidth communications channel through the second transceiver based on the value of the priority code received by the first transceiver **(column& lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lumieux et al. can be implemented by associated packet flows with a QOS requirement. The motivation for this is to ensure that the requirements are met when the channels are allocated.

Regarding claim 12, Fujisawa discloses a method for adapting packets-based digital communications between a first communications network and a second communications network **(see Figure 1, Ethernet Sub-network 2, Bridge 4, and IEEE 1394 Sub-network 3 [packets of data are transmitted and received in the Ethernet network and the 1394 network via Bridge 4])**, said method comprising the steps of: detecting in a communication form a first device in the first communications network, a prioritized data packet, determining whether the prioritized data packet requires transmission to a second device in the second communications network **(column 12, lines 31-34 [the CPU in Bridge 4 determines if the packet is to be received by the Ethernet interface 13 or the 1394 interface 14]**, the second communications network having a communications protocol that allows for setup and communications over discrete channels of a reserved bandwidth; establishing communications with said second device to open a reserved bandwidth data transmission channel; determining that said reserved data transmission channel has been opened **(column 4, lines 46-48 [the entire network is controlled according to TCP/IP, TCP incorporates a connection establishment stage, therefore either network has a protocol that allows for setup and communications on a channel; establishment/termination is done with an ACK/FIN message])** and modifying the data packet to be suitable for communications over the second communications network **(column 5, lines 26-32 [the bridge transforms a packet from the Ethernet network into a predetermined format in the data link layer and transmits it to the 1394 network and vice-versa])**. Fujisawa does not disclose that the first communications network has a prioritized

communications protocol. However, Skarica et al. discloses such a feature **(column 4, lines 38-40 [Ethernet supports quality of service protocols such as IEEE 802.1p, MPLS, and Diffserv])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Skarica et al. into the system of Fujisawa. The method of Skarica et al. can be implemented by modifying the packets of the Ethernet network to include a Type of Service (ToS) Field or a Quality of Service (QoS) Field to specify the requested service by Ethernet Terminal 5. The motivation for this is to enable the bridge to allocate enough bandwidth for the QoS requested.

The references as applied above do not disclose determining a priority code associated with the data packet and establishing a channel in response to the priority code for communicating information in the stream of packets based on digital data to a second network. However, Lemieux et al. discloses such a feature **(column8, lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lemieux et al. can be established by enabling the bridge to establish a suitable channel based on the QoS associated with the packet. The motivation for this is to ensure the transmission of data across the network and thereby creating a more reliable network.

Regarding claim 13, Fujisawa further discloses that the first communications system is an Ethernet network **(see Figure 1, Ethernet Sub-network 2)**.

Regarding claim 14, Fujisawa further discloses that the second communications network is an IEEE 1394 network **(see Figure 1, IEEE Sub-network 3)**.

Regarding claim 20, Lemieux et al. further discloses evaluating a portion of a data header contained in the data packet and requesting a bandwidth size based on the results of the evaluation **(column8, lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lumieux et al. can be implemented by associated packet flows with a QOS requirement. The motivation for this is to ensure that the requirements are met when the channels are allocated.

Regarding claim 21, Fujisawa further discloses a computer readable medium storing code which when executed by a processor performs the method of claim 12 **(see Figure 1, Memory 12)**.

Regarding claim 22, Fujisawa discloses an apparatus for proving packet-based digital communications between a first network communications network and a second communications network **(see Figure 1, Ethernet Sub-network 2, Bridge 4, and IEEE 1394 Sub-network 3 [packets of data are transmitted and received in the Ethernet network and the 1394 network via Bridge 4])**, the apparatus comprising a first

transceiver for communicating with the first network **(see Figure 2, Ethernet Interface 13)**; a second transceiver adapted for communicating with the second communications network **(see Figure 2, 1394 Interface 14)**, the second network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth **(column 4, lines 46-48 [the entire network is controlled according to TCP/IP, TCP incorporates a connection establishment stage, therefore either network has a protocol that allows for setup and communications on a channel])**; a processor in communication with the first and second transceivers **(see Figure 2, CPU 11)**; wherein the processor is adapted to perform a first modification process to convert a data packet received form the first transceiver into a format suitable for communication through the second network and the processor is further configured to perform a second modification to convert a data packet received from the second transceiver into a suitable format for communication through the first transceiver to the first network **(column 5, lines 26-32 [the bridge transforms a packet from the Ethernet network into a predetermined format in the data link layer and transmits it to the 1394 network and vice-versa])**. Fujisawa does not disclose that the first communications network has a prioritized communications protocol. However, Skarica et al. discloses such a feature **(column 4, lines 38-40 [Ethernet supports quality of service protocols such as IEEE 802.1p, MPLS, and Diffserv])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Skarica et al. into the system

of Fujisawa. The method of Skarica et al. can be implemented by modifying the packets of the Ethernet network to include a Type of Service (ToS) Field or a Quality of Service (QoS) Field to specify the requested service by Ethernet Terminal 5. The motivation for this is to enable the bridge to allocate enough bandwidth for the QoS requested.

The references as applied above do not disclose determining a priority code associated with the data packet and establishing a channel in response to the priority code for communicating information in the stream of packets based on digital data to a second network. However, Lemieux et al. discloses such a feature **(column 8, lines 22-25 [the packet flows have associated QoS requirements and the network channels are established to ensure that those requirements are met])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Lemieux et al. into the system of the references as applied above. The method of Lemieux et al. can be established by enabling the bridge to establish a suitable channel based on the QoS associated with the packet. The motivation for this is to ensure the transmission of data across the network and thereby creating a more reliable network.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et al. (US 6,968,374) as applied to claim 1 above, and further in view of Du et al. (US 6,181,947).

Regarding claim 2, Fujisawa further discloses that the first network is an Ethernet network and the second communications is an IEEE 1394 network **(see Figure 1,**

Ethernet Sub-network 2, Bridge 4, and IEEE 1394 Sub-network 3 [packets of data are transmitted and received in the Ethemet network and the 1394 network via Bridge 4]). The references as applied above are silent regarding an asynchronous channel based on said priority code. However, Du et al. discloses such a feature **(column 2, lines 40-45 [the base station allocates the available asynchronous channels to packets in order of priority])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Du et al. into the system of the references as applied above. The method of Du et al. can be implemented by packets to be transmitted on available asynchronous channels based on the priority. The motivation for this is to maintain a quality of service in the network.

10. Claims 3, 10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et al. (US 6,968,374) as applied to claim 1,5, and 12 above, and further in view of Brewer (6,657,999).

Regarding claim 3, the references as applied above disclose all the claimed subject matter recited in claim 1, but do not disclose the step of modifying header information comprises embedding an IP header associated with the data packet into an OSl Layer 3 header in the packet suitable for transmission over the second communications network. However, Brewer discloses such a feature **(see Figure 4b, steps 54 and column 16, lines 53-63 [a source host computer on the 1394 network**

sends a packet to a destination host computer of the Ethernet network via host computer H4, the link layer of Host Computer H4 changes the destination HPA of the packet so that the proper destination host computer receives that packet]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Brewer into the system of the references as applied above. The method of Brewer can be implemented by enabling Bridge 4 to change the destination HPA of the packet so that the proper destination host computer in the Ethernet network receives that packet. The motivation for this is to enable communication across differently structured networks

Regarding claim 10, the references as applied above disclose all the claimed subject matter recited in claim 5, but do not disclose the step of modifying header information comprises embedding an IP header associated with the data packet into an OSI Layer 3 header in the packet suitable for transmission over the second communications network. However, Brewer discloses such a feature **(see Figure 4b, steps 54 and column 16, lines 53-63 [a source host computer on the 1394 network sends a packet to a destination host computer of the Ethernet network via host computer H4, the link layer of Host Computer H4 changes the destination HPA of the packet so that the proper destination host computer receives that packet])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Brewer into the system of the references as applied above. The method of Brewer can be implemented by enabling Bridge 4 to change the destination HPA of the packet so that the proper destination host

computer in the Ethernet network receives that packet. The motivation for this is to enable communication across differently structured networks.

Regarding claim 16, the references as applied above disclose all the claimed subject matter recited in claim 12, but do not disclose the step of modifying header information comprises embedding an IP header associated with the data packet into an OSI Layer 3 header in the packet suitable for transmission over the second communications network. However, Brewer discloses such a feature **(see Figure 4b, steps 54 and column 16, lines 53-63 [a source host computer on the 1394 network sends a packet to a destination host computer of the Ethernet network via host computer H4, the link layer of Host Computer H4 changes the destination HPA of the packet so that the proper destination host computer receives that packet])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Brewer into the system of the references as applied above. The method of Brewer can be implemented by enabling Bridge 4 to change the destination HPA of the packet so that the proper destination host computer in the Ethernet network receives that packet. The motivation for this is to enable communication across differently structured networks

11. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et al. (US 6,968,374) as applied to claims 5 and 12 above, and further in view of Walke et al. (US 7,016,676).

Regarding claim 8, the references as applied above disclose all the claimed subject matter recited in claim 5, but do not disclose that the second communications network is a HiperLAN/2 network. However, Walke et al. discloses such a feature **(column 5, lines 21-30 and 37-40 [central control station 13 controls access for the HiperLAN/2 network and the IEEE 802.11a network (802.11a is a wireless Ethernet standard)])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Walke et al. into the system of the references as applied above. The method of Walke et al. can be implemented by replacing the IEEE 1394 network with a HiperLAN/2 network. The motivation for this is to enable communications from Ethernet-HiperLAN/2 networks.

Regarding claim 15, the references as applied above disclose all the claimed subject matter recited in claim 12, but do not disclose that the second communications network is a HiperLAN/2 network. However, Walke et al. discloses such a feature **(column 5, lines 21-30 and 37-40 [central control station 13 controls access for the HiperLAN/2 network and the IEEE 802.11a network (802.11a is a wireless Ethernet standard)])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Walke et al. into the system of the references as applied above. The method of Walke et al. can be implemented by replacing the IEEE 1394 network with a HiperLAN/2 network. The motivation for this is to enable communications from Ethernet-HiperLAN/2 networks.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et al. (US 6,968,374) as applied to claim 5 above, and further in view of Hamamoto et al. (6,038,233).

Regarding claim 11, the references as applied above disclose all the claimed subject matter recited in claim 5, but don not recite that the second modification process strips from a data packet received from the second communications network a data header associated the second network and where is the second modification process further converts the data packet into a format suitable for transmission to the first network. However, Hamamoto et al. discloses such a feature **(column 8, lines 50-54 [the header translation unit replaces the source IPv6 IP address with an IPv4 IP address])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Hamamoto et al. into the system of the references as applied above. The method of Hamamoto et al. can be implemented by enabling Bridge 4 to replace addresses to suit the network that the packet is being forwarded. The motivation for this is to enable different networks to communicate via Bridge 4.

13. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et

al. (US 6,968,374) as applied to claim 12 above, and further in view of RFC 0793 (Transmission Control Protocol - September 1981).

Regarding claim 17, the references as applied above disclose all the claimed subject matter recited in claim 12, but do not disclose determining there is no more data to be received from the first device and establishing communications with the second device to close the reserved data transmission channel. However, RFC 0793 discloses such a feature **(p. 16 of 88, lines 1-2 and p. 20 of 88, line 9 [receiving a FIN control flag indicated that there is no more data form sender and to clear the connection])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a FIN control flag to end a connection between to entities. The motivation for this is enable the system to effectively allocate and de-allocate bandwidth as connections are requested and terminated.

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa (US 7,352,726) in view of Skarica et al. (US 7,171,121) in view of Lemieux et al. (US 6,968,374) as applied to claim 12 above, and further in view of Naudus (US 2002/0016837).

Regarding claim 18,, the references as applied above disclose all the claimed subject matter recited in claim 12, but do not disclose closing the channel after a predetermined period of time within no further communications is received from the first device. However, Naudus discloses such a feature **(paragraph 0060, lines 11-14 [the**

nodes in the network monitor connections and terminate those connections that have been idle for a predetermined amount of time]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Naudus into the system of the references as applied above. The method of Naudus can be implemented by enabling Bridge 4 to monitor all connections and to terminate connections that have remained idle for a period of time. The motivation for this is to effectively use limited network resources.

Response to Arguments

15. Applicant's arguments filed October 9th, 2008 have been carefully considered, but deemed to be not persuasive.

Regarding claims 1,5,12, and 20, on page 8 of the Remarks, the applicant argues that Lemieux et al. does not disclose determining a priority code and establishing a channel in response to the priority code. However, the examiner respectfully disagrees. Lemieux et al. discloses that the packet flows have a QoS class (A to C) **(column 8, lines 31-33)**. Lemieux et al. further discloses that each QoS requirement (i.e. QoS class) determines how each network channel is established **(column 8, lines 22-25)**. Each QoS class is associated with a respective delay **(column 8, lines 63-64)**. Therefore, each class A's delay is less than class B's delay, which in turn is less than class C's delay.

Therefore, one of ordinary skill in the art would have been able to determine how to setup a network channel for a given packet flow based on the QoS requirements associated with the QoS class.

Conclusion

16. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER T. WYLLIE whose telephone number is (571) 270-3937. The examiner can normally be reached on Monday through Friday 8:30am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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